

no fewer than 63 out of 91 cases; viz., that the patient retained his two limbs, and was not condemned to hop about for life on one.

The mortality after amputation through the thigh for disease is, it must be confessed, higher than that just given for excision of the knee-joint. In the Royal Infirmary of Glasgow, between 1842 and 1857 inclusive, there were performed 128 secondary amputations through the thigh; of that number, 65 patients died, and 63 recovered. About one in two died. But I have not separated the cases of amputation for disease from those for accident in this statement. Now the latter class of cases, viz., secondary amputations of the thigh for accidents, almost all die; but they are not distinguished in the operation-table of the hospital; and, therefore, I could not do so without very great labour. The proportion of deaths given above is, for that reason, greater than if the amputations had all been for disease. I would guess the true percentage at 40 or thereabout.

Now there were only 21 deaths in 91 cases of excision of the knee-joint; and that is 23.07 per cent., or nearly one-third less than the proportion of deaths after amputation through the thigh for disease. It ought to be remembered, too, that these 91 cases were operated on and treated in many different ways, and above all that their diseases and constitutions were different. It is quite possible, therefore, that in future, by a better selection of cases, and a more skilful choice of the precise manner of operating, the mortality may be still further diminished. At all events, it will not do for surgeons any longer to ignore this contrast of results; and, however great their prejudice, however plausible their arguments against the operation of excision of the knee-joint, they must bend to stubborn facts and reconsider their opinions.

Dr. Watson states that he has lately operated by a single straight incision drawn right across from the one side to the other of the knee. Its middle corresponds with the middle of the patella, which I cut out, and open the joint. This is a much smaller wound than that occasioned by either of the other two modes of operating; and it is quite sufficient for the purpose required, namely, of fairly exposing the articular ends of the bones.

In cutting the bones, Dr. W. uses Graham's saw, and slants its blade so as to cut the end of the former convex, and thus save its length while he removes its entire surface. Again, he cut the head of the tibia, so as to make a concavity into which the convex end of the femur fits.

Any of the morbid structures which have not previously been removed, should now be cut off; and finally, the knife should be drawn downwards at each extremity of the wound, so as to facilitate the escape of the discharge. The limb in most cases may now be straightened, and a few wire sutures inserted in the front of the incision. No bloodvessels of importance are cut in the performance of this operation, so that ligatures are seldom required, and almost no blood is lost.

One other point of importance belonging to the operation, has occasioned some difference of opinion among surgeons; and that is, whether or not the hamstring tendons should be cut, when from long disease they have become contracted, or whether they should be gradually extended afterwards. Now, our experience at the Royal Infirmary shows, that the latter process gives far too much pain, and interferes too importantly with the granulation of the wound, to be received as the proper practice. In Case VIII., the worst consequences were attributed by the attending surgeons to the adoption of this proceeding. On the other hand, the cutting of these tendons, already exposed at each side of the wound, could not do any harm, but, on the contrary, would make the future management of the limb a matter of comparative ease to both patient and surgeon.

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30. *Scooping of Bone substituted for Resection or Amputation.*—M. SÉDILLOT, of Strasburg, has for the last two years seized every opportunity, in cases of diseased bone, of scooping out the affected parts, and leaving the cortical portions, rather than have recourse to resection or amputation. In April, 1858, he brought this mode of operating before the Academy of Sciences of Paris, and then stated that he was led to adopt the method from observing the remarkable

osteogenic powers of the periosteum pointed out by M. Flourens and M. Ollier. Instead, however, of dissecting the periosteum from the bone, and removing the latter (a proceeding which offers some difficulty), M. Sédillot leaves the whole cortical portion of the bone, as above stated, and removes the carious parts.

On the 31st of October last the author brought before the same Academy an account of the cases operated upon in this manner. Ten patients recovered, and three died. Amongst the former, M. Sédillot mentions the case of a young girl in whom he had scooped out the lower third of the femur and the condyles; she now walks very well. Another case is that of a young man suffering from caries of the lower part of the left tibia; the scooping here included the whole of the articular extremity, and the inside of the malleolus; the patient now works hard, and can walk fifteen or sixteen miles. The fatal cases may not be charged to the operation; one died of epidemic sloughing phagedena six weeks after the scooping, and the others several months after submitting to operative procedures. M. Marmy, of Lyons, and M. Ehrmann, a military surgeon in Algeria, have both sent to the author a successful case of this operation.

If we are not much mistaken, M. Sédillot's operation has much analogy to the gouging in caries so often successfully practised in the hospitals of this metropolis. But a real improvement in the operation of resection of joints is the careful preservation of as much periosteum from the extremity of the articular surfaces some distance up the shafts as has not been destroyed by the progress of disease. This should be borne in mind by those surgeons who frequently perform resection of joints; nor are the practical proofs of the utility of these precautions wanting. M. Vernel, of Paris, for instance, has placed several cases of resection of the elbow before the Academy of Sciences, and shows that, by dissecting very carefully whatever periosteum is left, he had, by regeneration of bone, in one of his cases, only two inches shortening, after having removed altogether four inches of osseous texture from the humerus, radius, and ulna. In another case, M. Vernel was able to leave a regular cylinder of periosteum at the lower extremity of the shaft of the humerus; and in this instance, also, the results were extremely satisfactory.—*Lancet*, Dec. 10, 1859.

31. *Extra-Capsular Fracture of Neck of Femur*.—Prof. ALEX. GORDON, of Queen's College, Belfast, relates (*Dub. Hosp. Gaz.*, Sept. 15, 1859) the following interesting case:—

"William Mitchell, aged 58, but apparently older, a pensioner, admitted into the Belfast General Hospital, February 12, 1859. He states that his habits are temperate, that for some time past he has been subject to a chronic cough and shortness of breathing. On the evening previous to his admission, when passing along a dark lane, he was tripped by a rope, fell against the curb-stone, and broke his thigh. On admission into hospital, the long splint was applied. On visiting him on the following day, there was no deformity, no shortening of the limb, nor complaint of pain in the thigh or hip.

"15th. As the difficulty of breathing had increased, obliging him at intervals to assume the sitting posture, he removed the perineal band to be enabled to sit up. To permit him, therefore, to do so with greater facility and comfort, the long splint was taken off, and the limb placed on the double-inclined plane. This did not cause him pain, at least he made no complaint, nor was the fracture apparently disturbed.

"16th. His expression is maniacal; he is talking incoherently. During the night he made several attempts to rise out of bed. The upper fragment of femur can be felt distinctly, about three inches below the trochanter major, causing the thigh at this part to be much bowed outwards. Measurement along the convexity does not show any shortening of the limb, but that of the concavity, or inner side of thigh, is shorter by two inches at least. Pulse 88, soft; skin moist; bowels open; tongue slightly furred; respiration 40. The limb was extended, and a pad and splint applied to the outer side of thigh, which was still kept on the double-inclined plane, and a broad piece of linen, with straps attached, was laid along the outer side of opposite thigh; some of the straps were carried behind, and others in front of the thigh, and being tied, prevented the outward displacement.